Weekly Report for 2015/07/27-2015/08/0

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Progress

1. TCPTree Project

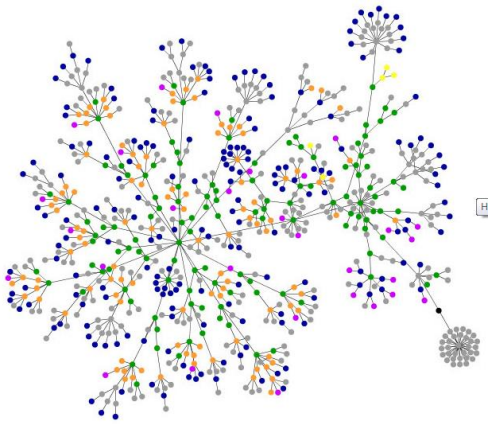
2. Revise vis 2015 submission

3. Large Graph Visualization

1) Write the design document for relation network visualization

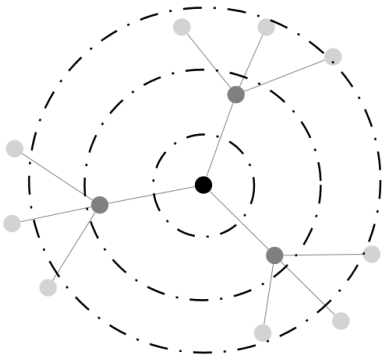
Design Alternatives：

a) Force-Directed Layout



This method is not efficient to visualize ego network because it doesn't show the hierarchical structure of the ego network.

b) Radial Layout

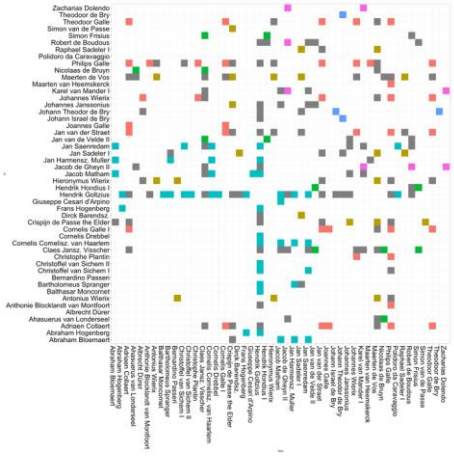


This is a good choice to visualize the ego network. But when there are many nodes in the network, clutter of nodes in outer layers will be severe. Lintao has tested an ego network with 1700+ nodes

and 7000+ edges. Nodes in outermost layer almost join to a line. Therefore, the layout need to be modified to hold more than 2000 nodes.

Currently I think a promising way to modify the radial layout is to expand the circle to a ring area and arrange the nodes in each layer by force-directed algorithms.

c) Adjacency Matrix



2) Discuss community visualization

We discussed the design of community visualization.

Plan

1. TCPTree Project

Finish variable tree.

Finish the control panel and other interactions.

2. Revise vis2015 submission

3. Large Graph

1) Finish the design document.